

CLEAN VERSION OF AMENDED CLAIMS - OZ 51241

7. A nucleic acid sequence encoding a monooxygenase as claimed in claim 1 and the complementary nucleic acid sequence thereof.
12. (amended) A process for the enzymatic production of terminally or subterminally hydroxylated aliphatic carboxylic acids, which comprises
 - a1) culturing a recombinant microorganism which has been transformed with a vector which encompasses an expression construct comprising, under the genetic control of regulatory nucleic acid sequences, a sequence which encompasses a nucleic acid sequence encoding the monooxygenase of claim 1 in the presence of a culture medium which contains at least one hydroxylatable carboxylic acid or at least one hydroxylatable carboxylic acid derivative; or
 - a2) incubating a reaction medium containing at least one hydroxylatable carboxylic acid or at least one hydroxylatable carboxylic acid derivative with an enzyme as claimed in claim 1, and
 - b) isolating the resulting hydroxylated product from the medium.
14. A method as claimed in claim 13, wherein the hydroxylatable carboxylic acid is a C₈-C₁₂-monocarboxylic acid or a derivative thereof and the monooxygenase used comprises at least one of the following amino acid substitution patterns:
 - a) F87V;
 - b) F87A L188K;
 - c) F87V L188K;

CLEAN VERSION OF AMENDED CLAIMS - OZ 51241

- d) F87A L188K A74G;
 - e) F87V L188K A74G;
 - f) F87A L188K A74G R47F;
 - g) F87V L188K A74G R47F;
 - h) F87A L188K A74G R47F V26T; or
 - i) F87V L188K A74G R47F V26T.
16. A method as claimed in claim 12, wherein the reaction is carried out in the presence of an electron donor or a reduction equivalent.